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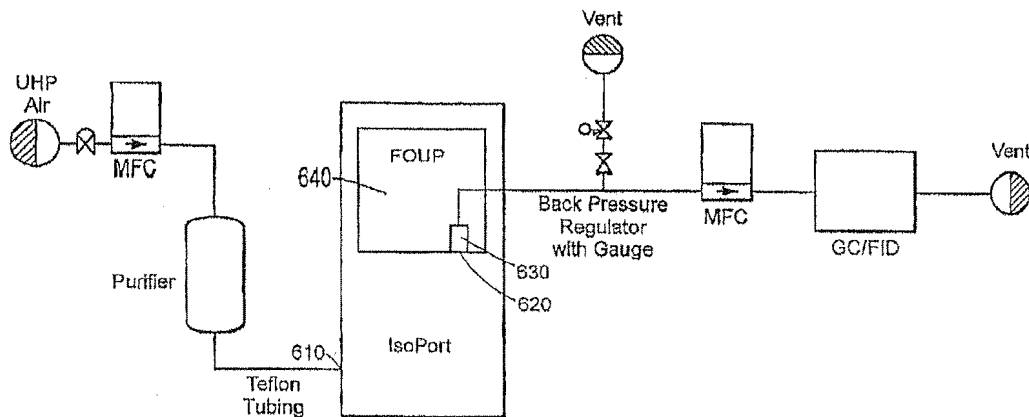
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PURGING OF A WAFER CONVEYANCE CONTAINER



(57) Abstract: Embodiments of the invention are directed to methods and systems of purging of transfer containers, such as standardized mechanical interface (SMIF) pods. In particular, purified purge gases can purify front operated unified pods (FOUPs) and other non hermetically sealed transfer containers, such that the containers can be interfaced with a sealed chamber (e.g., a semiconductor processing tool) without detrimentally contaminating the environment of the sealed chamber with organics and other harmful contaminants. The methods and systems may be used to transfer objects, such as wafers, semiconductor components, and other materials requiring exposure to extremely clean environments, during electronic materials manufacturing and processing.

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# INTERNATIONAL SEARCH REPORT

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<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC 7 H01L21/00 H01L21/68 B01D46/00 B01D50/00 F24F3/16		
According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) IPC 7 H01L B01D F24F		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used)  EPO-Internal, PAJ, WPI Data		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/124906 A1 (SUZUKI YOKO ET AL) 12 September 2002 (2002-09-12) paragraphs [0011], [0220]; figures 57A, 57B	1-12
X	paragraphs [0243], [0245]; figure 68	13-21
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X	US 5 644 855 A (MCDERMOTT ET AL) 8 July 1997 (1997-07-08) column 9, line 29 - column 10, line 5	1-12
X	EP 1 182 694 A (TOKYO ELECTRON LIMITED) 27 February 2002 (2002-02-27) paragraphs [0041] - [0063]; figures 1,2	13-21
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<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C.		
<input checked="" type="checkbox"/> Patent family members are listed in annex.		
* Special categories of cited documents :		
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	
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"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family	
"P" document published prior to the international filing date but later than the priority date claimed		
Date of the actual completion of the international search  <p style="text-align: center; font-size: 1.2em;">2 August 2005</p>	Date of mailing of the international search report  <p style="text-align: center; font-size: 1.2em; font-weight: bold;">05.08.05</p>	
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer  <p style="text-align: center; font-size: 1.2em;">Angermeier, D</p>	

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 169 272 A (BONORA ET AL) 8 December 1992 (1992-12-08) column 1, line 59 - column 2, line 28 -----	1-12

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2005/003287

## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2.  Claims Nos.:  
because they relate to parts of the international Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
  
3.  Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1.  As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.  As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4.  No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.  
 No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-12

This invention concerns a method of purifying a transfer container comprising the step of purging the transfer container with a gas having a certain concentration. The problem to be solved is to reduce device contamination.

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2. claims: 13-21

This invention is directed to a method and a system of transferring an object from a transfer container to a sealed chamber. The problem to be solved is to improve the process control.

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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